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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Docket No: Q80139

Tetsuji KONDO, et al.

Appln. No.: 10/808,292

Group Art Unit: 3747

Confirmation No.: 5510

Examiner: Mahmoud Gimie

Filed: March 25, 2004

For: FUEL INJECTION DEVICE

REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellants respectfully submit this Reply Brief in response to the Examiner's Answer dated December 2, 2005. Entry of this Reply Brief is respectfully requested.

Table of Contents

STATUS OF CLAIMS	2
GROUND OF REJECTION TO BE REVIEWED ON APPEAL	3
ARGUMENT	4
CONCLUSION	6

STATUS OF CLAIMS

Claims 3, 4, 7, 10 and 11 are all the claims pending in the application.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 3 and 11 are anticipated under 35 U.S.C. § 102(b) by Franchitto (U.S. Patent No. 5, 724,946).

2. Whether claims 4, 7, and 10 would have been obvious, within the meaning of 35 U.S.C. § 103(a), over Franchitto.

ARGUMENT

In the *Response to Argument* section (10) of the Examiner's Answer, the Examiner responds to Appellants' arguments set forth in the Appeal Brief dated November 18, 2005. In response, Appellants maintain that the present invention, as claimed, is patentable over the applied references at least based on the previously submitted arguments and the arguments set forth below.

- A. Franchitto does not disclose or suggest at least, "said fuel injection valve is provided with a snap spring that is fitted into said fitting hole and extends in the axial direction of said fuel injection valve," as recited in claims 3 and 11.

In the Appeal Brief dated November 18, 2005, Appellants argued that Franchitto does not disclose or suggest the limitation quoted in the sub-heading above. In the *Response to Argument* section of the Examiner's Answer, the Examiner alleges:

These arguments are not persuasive because the locking pin (232) simply does not slide into the locking groove (318) as argued by Appellant's, but rather, it snaps (col. 3, line 9) in the locking groove (218,318). Franchitto teaches (with reference to Figure 4) that to mount the fuel injector (218), the locking pin (232) is received in the locking groove (218), urged past the necked down portion (220), which indicates that the locking pin is flexible enough to be urged through the necked down portion (220). Further, with reference to Figure 7, the locking pin is retained in the locking groove (318) after being urged through the necked down portion of the injector cup and extended circumferentially (col. 3, lines 22-23) which inherently require flexibility (spring action) of the locking pin (232) that is consistent with the language of the Franchitto reference as being snap assembled (col. 3, line 33).

In response, Appellants respectfully submit that simply because the locking pin (232) can be urged through a neck down portion of an injector cup does not denote that the locking pin (232) is inherently flexible. The locking pin (232) appears to be a solid pin that is slid into a

U.S. Appln. No.: 10/808,292

groove or opening for receiving said locking pin. The groove or opening is for receiving the locking pin, and the locking pin (232) does not have to flex to be slid or snapped therein. See, for example, Figures 4 and 7 of Franchitto. Franchitto only discloses that the engaging locking pin (232) is slid past a necked down portion (220) into a retaining portion (222), however there is no mention whatsoever that the engaging locking pin (232) is flexed. Therefore, at least based on the foregoing and the arguments previously submitted, Appellants maintain that Franchitto does not disclose or suggest the above-quoted features of claim 3.

Appellants maintain that claim 11 is patentable at least by virtue of its dependency from independent claim 3.

Further, with respect to the rejection of claim 11, the Examiner alleges (see Examiner's Answer):

(b) Appellant's argue with reference to claim 11, that the Examiner does not show and Franchitto does not disclose a component that corresponds to the claimed "snap spring (232)" which is "movable in a radial direction when mounting the fuel injection valve (214) on the fuel distribution pipe (10,110).

In response, Appellants submit that the locking pin (232) of Franchitto is clearly not movable in a radial direction when mounting the fuel injection valve on said fuel distribution pipe. The Examiner appears to confuse the different claimed directions ("axial direction" and "radial direction"), which have been established in independent claim 3 and claim 11, which depends from claim 3. For example, the radial direction is a direction moving inward from or outward to an outer circumferential plane of the fuel injector cup (212), toward or from a necked down portion (220). When the locking pin is slid into the retaining section (222), it is moved in

U.S. Appln. No.: 10/808,292

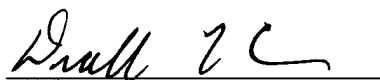
an axial direction, not a radial direction. At least based on the foregoing, Appellants maintain that claim 11 is patentably distinguishable over Franchitto.

Finally, Appellants submit that dependent claims 4, 7, and 10 are patentable at least by virtue of their dependency from independent claim 3.

CONCLUSION

For the above reasons as well as the reasons set forth in Appeal Brief, Appellants respectfully request that the Board reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



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